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December 16, 2003

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DEC 1 6 2003

Ms. Marlene H. Dortch, Secretary Federal Communications Commission Office of the Secretary 445 12th Street, S.W. Washington, D.C 20554

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

RE:

Review of the Commission's Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exhange Carriers, WC Docket Number 03-173

Dear Ms. Dortch:

Enclosed for filing please find an original and five copies of the Comments of the Verizon Telephone Companies in the above-referenced proceeding. I am also providing an additional copy to be file-stamped and returned to me.

Please do not hesitate to contact me at 202.663.6455 should you have any questions.

Sincerely,

Lýrin R. Charytan

Enclosures

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Marlene H. Dortch Secretary Federal Communications Commission

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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In the Matter of)		
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Review of the Commission's Rules)		
Regarding the Pricing of Unbundled)	WC Docket No. 03-173	
Network Elements and the Resale of)		
Service by Incumbent Local Exchange)		
Carriers)		

COMMENTS OF THE VERIZON TELEPHONE COMPANIES

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SUMMARY

The ultimate goal of the 1996 Act was to encourage meaningful facilities-based competition. The Commission's current TELRIC rules, however, are undermining that goal. As the Commission itself has now recognized in its Notice of Proposed Rulemaking, the core problem with the TELRIC rules is directly traceable to the fact that they are not tethered to any real-world network, but instead are based on a hypothetical network construct that assumes false efficiencies that no real-world carrier can achieve. The hypothetical nature of the rules also results in a standardless "black box" approach to setting prices that can be manipulated to produce any desired result. That process has produced rates that are well below any rational measure of the incumbent's, or any other carrier's, real-world costs, forward-looking or otherwise.

The resulting below-cost UNE rates send distorted economic signals to the CLECs and to the industry at large. This has contributed to a massive decline in telecommunications industry investment by *all* providers and has devalued existing facilities investment. Because no carrier providing service in the real world can hope to match below-cost UNE rates, CLECs have little incentive to invest in their own facilities. Indeed, some CLECs have announced that they intend to rely *exclusively* on UNE-P, because it presents a far more profitable means of providing service than making the capital outlays necessary for deployment of network infrastructure. Current UNE-P pricing is so low that UNE-based CLECs have been able to earn enormous profit margins as high as 50 percent. This has led to the development of a cottage industry dedicated to showing companies how to become UNE-P-based CLECs and earn substantial profits.

In fact, the cost of UNEs is often less than it costs to use CLECs' existing network infrastructure, so that CLECs seeking to earn such artificial profit margins are even abandoning

their own facilities in favor of UNE-P. For example, from December 2000 to December 2002 CLEC-owned lines (other than cable telephony) declined from 4.1 million to 3.4 million even while the number of UNE-P lines skyrocketed from 2.8 to 10.2 million. As a result, while CLEC lines using CLEC switches constituted 67 percent of CLEC lines in December 1999, that figure dropped to 35 percent by the middle of 2002. At the same time, TELRIC rates also deter investment by *ILECs* since they will not recover their costs for any such investment.

Thus, below-cost TELRIC rates have contributed to an overall decline in facilities investment in the telecommunications industry. Objective marketplace data show that between 2000 and 2002, as TELRIC rates dropped, overall facilities investment by wireline telecommunications carriers declined from \$104.8 billion to \$42.8 billion — a decline of more than \$60 billion. Analysts have estimated that total capital expenditures by the Bell companies combined declined by approximately 35 percent from 2001 to 2002 alone. Moreover, under TELRIC, facilities-based competitors find their rates undercut by CLECs who benefit from below-cost UNE rates, and they are accordingly unable to recover their investment costs: Capital expenditures by facilities-based CLECs reportedly declined by 19 percent from 2000 to 2001, and by 56 percent from 2001 to 2002. TELRIC also has devalued existing facilities investments by ILECs and other carriers. For example, the market capitalization of the telecommunications and equipment manufacturing sectors declined by \$2 trillion between 2000 and 2002. One analyst has concluded that network infrastructure has been devalued by two-thurds.

The consequences for consumers and the U.S. economy in general are serious. Analysts have found that TELRIC pricing has contributed to an annual decline in economic output and national income equivalent to \$101 per household. Telecommunications investment plays a

central role in the U.S. economy; both the boom of the 1990s, as well as the subsequent crash, were driven in substantial measure by the state of the telecommunications industry. While the economy may be slowly recovering, the telecommunications industry is lagging behind. If the TELRIC rules are not reformed to restore correct investment incentives, the telecommunications industry will remain decoupled from the rest of the economy, and ultimately competition and consumers will suffer

The economic distortions caused by TELRIC are exacerbated by the explosive growth in intermodal competition. Cable telephony providers already offer service to 15 percent of U.S. homes, have penetration rates as high as 40 percent in most mature markets, and are adding tens of thousands of new subscribers each month Similarly, voice-over-IP ("VoIP") service provides a significant and rapidly growing source of competition. AOL Time Warner recently announced that it would provide VoIP service on a nationwide basis and be in "most, if not all, of its markets" by the end of 2004. Cablevision has deployed cable telephony service throughout its New York and New Jersey service area. All other major cable companies have now introduced initial commercial VoIP service or have trials in process. Vonage — a provider of exclusively VoIP services — offers service to customers throughout the country. And, of course, wireless telephony has captured substantial numbers of customers and significant traffic. Indeed, analysts have estimated that wireless traffic has displaced 30 percent of total wireline minutes. Incumbents must compete with all of these providers, while being handicapped by the requirement that they subsidize CLEC entry through below-cost UNE rates. At the same time, as noted, these intermodal providers are forced to compete with CLECs that have the artificial advantage of below-cost UNEs, further skewing economic signals and investment incentives.

To end the downward spiral of UNE rates and correct the current market distortions, the Commission's new pricing rules should base UNE rates on the forward-looking cost of providing UNEs using the incumbents' real-world networks. Incumbents' real-world data and costs present a far better measure of efficient, forward-looking costs in a competitive market than speculation by regulators, and have long been used by regulators to set forward-looking rates. Most incumbent carriers have been subject to price cap regulation for many years, which has given them a strong motivation to make efficient decisions about network investment — such as when to replace existing facilities with new technology — and about operating expenses. Further, the rapidly increasing intermodal competition described above, as well as competition from competitive access providers and competitive local exchange carriers, have similarly created strong efficiency incentives for ILECs.

Setting UNE prices based on ILECs' actual forward-looking costs sends the proper economic signals to CLECs since, to the extent they can provide service more efficiently using alternative facilities or technologies, they will have an economic incentive to do so. And that, in turn, will force incumbents to find new ways to improve their own efficiency, triggering the type of virtuous cycle of investment and innovation that real, rather than purely "synthetic," competition produces.

Basing UNE prices on ILECs' actual forward-looking costs also is legally required.

First, the Act itself requires that UNE rates be nondiscriminatory. Yet the current TELRIC rules discriminate against ILECs by permitting CLECs to use the ILECs' facilities at rates below the costs the ILECs themselves bear when using those same facilities to provide service. Second, the Constitution requires that, where the government compels a private party to provide a service, it must be compensated for its ongoing — that is, its actual forward-looking — costs.

The Commission's new rules should do more than just adopt the general principle that UNE rates should recover ILECs' actual forward-looking costs. In order to bring a measure of objectivity and rationality to the prices that will be set pursuant to the new rules, and to ensure that those prices provide correct incentives and send economically appropriate signals to the market, the Commission's rules should provide concrete and objective standards that are tied to the incumbent's existing real-world network.

Loops. The rules should specify that loop prices must be based on available information about the actual configuration of that network, such as loop lengths and structure type. Those prices also must reflect the mix of loop technologies (copper vs. integrated digital loop carrier vs. universal digital loop carrier) that the incumbent expects to use during the period that the prices will be in effect, as well as the actual levels of fill and structure sharing.

Switching. The rules should make clear that rates for circuit switching should be based on the mix of switch technologies the incumbent actually expects to purchase going forward and must include all relevant costs, including the appropriate portion of fixed, shared, and common costs. Moreover, investment costs for switching should be based on the prices the incumbent pays for the mix of switch purchases it expects to make, not, as CLECs have argued, prices based on a massive "new switch discount." And the rate structure for switching should include a minute of use component to reflect the undisputed fact that a substantial portion of switching costs are usage-sensitive

Expenses. Operating expenses should be determined using the incumbent's expected outof-pocket cash outlays. This will fairly compensate the incumbent for the amounts it will actually be required to spend going forward, while at the same time preserving incentives for other carriers to invest in alternative facilities or technologies to the extent they think they can operate them more efficiently.

Depreciation. The Commission's rules should specify that depreciation must be based on the incumbent's GAAP lives. Because those lives already are used for financial reporting purposes, they provide an objective standard for use in determining rates, and carriers have no incentive to use artificially short lives, since doing so would translate into lower reported earnings and a corresponding reduction in stock prices.

Cost of Capital. The Commission's rules should provide an objective standard for determining the cost of capital that takes into account all risks — those of a competitive market and the relevant regulatory risks. The Commission already has recognized that the cost of capital under the current rules should reflect the risks of a fully competitive market. That conclusion remains equally true if the Commission reforms its rules so that UNE prices are based on the incumbent's existing network. Such a change would not amount to abandoning the goal of setting prices that are consistent with those in a competitive market, but rather a shift from assuming an unreal world where prices are based on the ubiquitous and instantaneous deployment of new technologies to a real-world competitive market. Because neither the incumbents nor any company operate a stand-alone UNE business with a measurable cost of capital, the Commission should use the S&P Industrials as an objective, market-based proxy that fully accounts for the competitive risks faced by UNE providers. The competitive cost of capital figure should then be adjusted upward to reflect the additional regulatory risks imposed by the UNE regime (for example, the risk created by the fact that UNEs must be made available under the equivalent of short term leases that CLECs may abandon at any time, and the risk associated with fixed sunk investment).

Non-Recurring Charges Non-recurring charges should be based on the incumbent's actual out-of-pocket expenses. Incumbents have numerous incentives to perform non-recurring activities efficiently. Indeed, in some cases, such wholesale activities are more automated than the corresponding tasks performed for retail customers. In any event, basing non-recurring rates on the ILEC's actual costs is the only approach that will ensure appropriate cost recovery and send correct economic signals to CLECs concerning the costs of customer acquisition.

Moreover, as the Commission itself has previously recognized, non-recurring costs should be recovered through one-time non-recurring charges. Attempting instead to recover non-recurring costs through recurring rates would force the incumbents to become bankers for the CLECs and to take on the added risk that the non-recurring costs would never be recouped.

Finally, at the time that the Commission adopted its TELRIC rules (and on several occasions since), it also promised to make carriers whole in the event that its rules ultimately failed to provide the incumbents with adequate compensation to allow them to recoup their unrecovered historical investments. Actual experience since the time that the rules were adopted demonstrates that the TELRIC rules have in fact failed to do so. Accordingly, the Commission should now fulfill its pledge by establishing a separate — and competitively neutral — mechanism to provide for recovery of those unrecovered historical investments that cannot be recovered through UNE rates. This will serve to compensate incumbents fairly for amounts that were invested (and in many instances required to be invested) under the regulatory regime in effect prior to the passage of the 1996 Act, but that were not recovered under the regulatorily-prescribed depreciation rates in effect during that period. It also is consistent with the approach taken in other industries in response to a change in regulatory regimes and will enable the Commission to satisfy the constitutional requirement that any regulatory regime provide for

recovery of all prudently incurred investments. And it will do so without requiring competing carriers to bear those costs in the rates they pay for UNEs, since UNE rates themselves will continue to be set based on forward-looking costs.

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	
)	
Review of the Commission's Rules)	
Regarding the Pricing of Unbundled)	WC Docket No. 03-173
Network Elements and the Resale of)	
Service by Incumbent Local Exchange)	
Carriers)	

COMMENTS OF THE VERIZON TELEPHONE COMPANIES¹¹

The Commission should establish new, economically correct rules that base the rates for unbundled network elements (UNEs) on the incumbent's actual forward-looking costs. In particular, the Commission should abandon TELRIC's assumption of a hypothetical network with efficiencies that no real-world carrier can match. Actual market experience since the adoption of TELRIC has now made it abundantly clear that the TELRIC rules have produced prices that fail to compensate incumbents fairly for the use of their networks. Moreover, those rules have contributed substantially to a decline in new investment in local telephone networks and services and a devaluation of existing investment. Accordingly, the Commission should

The Verizon telephone companies ("Verizon") are the affiliated local telephone companies of Verizon Communications Inc. These companies are listed in Attachment A.

move quickly to reform its pricing rules so that they are based on the incumbent's existing network and costs, which provide a far more rational and reliable basis to measure the forward-looking costs of providing UNEs. This will send correct economic signals to all participants — incumbent carriers, competitive carriers, intermodal competitors, and end users — in the competitive local exchange market and thereby remove disincentives to investment and the development of facilities-based competition.

DISCUSSION

I. TELRIC IS FUNDAMENTALLY FLAWED.

The fundamental problem with the existing TELRIC rules is that they are not based on any real-world network, but instead are based on a hypothetical network that assumes false efficiencies that no actual carrier can achieve. As the Commission's TELRIC NPRM explains, "current TELRIC models typically are designed to answer the following question: If a single carrier were to build an efficient network today to serve all customer locations within a particular geographic area, taking as a given only the locations of existing wire centers, how much would it cost to construct and maintain the network?" In other words, the TELRIC methodology is based on a hypothetical network design built from scratch (with the sole exception of the location of the existing wire centers) that has instantaneously deployed only the most efficient technologies available in an optimal configuration. This hypothetical network construct is the root cause of TELRIC's inherent flaws and the primary reason that TELRIC has undermined the central goals of the 1996 Act.

A. Actual Market Experience Demonstrates That TELRIC Results in Below-Cost Rates, Discourages and Devalues Investment, and Precludes the Development of a Rational Wholesale Market.

Real-world market developments since 1996 demonstrate that TELRIC must be reformed. First, because no real-world carrier can match the hypothetical efficiencies assumed by TELRIC, TELRIC produces UNE rates that are lower than the costs that an ILEC or any other carrier could achieve. Second, these below-cost rates send incorrect economic signals to all

Notice of Proposed Rulemaking, Review of the Commission's Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exchange Carriers, WC Docket Number 03-173, FCC 03-224, ¶ 49 (rel. Sep. 15, 2003) ("NPRM").

carriers, which deters new investment and devalues existing investment, and impedes the development of facilities-based competition. Third, TELRIC has precluded the development of a rational wholesale market.

1. The Hypothetical Efficiencies Assumed By TELRIC Have Created a "Black Box" Process that Yields Below-Cost Rates.

No real-world carrier could have costs as low as the costs of a network in which the most efficient technologies are deployed ubiquitously and in the most efficient configuration, excepting only the location of existing wire centers. Because the telecommunications industry is characterized by long-lived, fixed cost assets, substantial sunk and transaction costs, and uncertainty about future demand and technological conditions, see Declaration of Robert Pindyck, Exh. 6, ¶¶ 11-14, all carriers will deploy new technologies only gradually and will always have a mix of technologies of different vintages in their network. See Declaration of Alfred E Kahn and Timothy Tardiff, Exh. 2 ¶¶ 18-20; Declaration of Howard Shelanski, Exh. 1 ¶¶ 6-10. As the NPRM acknowledges, "[i]n the real world. . . even in extremely competitive markets, firms do not instantaneously replace all of their facilities with every improvement in technology. Thus, even the most efficient carrier's network will reflect a mix of new and older technology at any given time." NPRM ¶ 50. By basing prices on the assumption of instantaneous and ubiquitous deployment, TELRIC produces rates that are lower than the costs that incumbents incur today and that do not emulate the prices that would be produced in a realworld competitive market.

Both the Commission and independent analysts have recognized that TELRIC produces UNE rates that are, in the words of Chairman Powell, "subsidized and below costs." Indeed,

Jeremy Pelofsky, FCC Chief Denies Leaving, Outlines Media Agenda, The Star-Ledger (Aug. 19, 2003).

unencumbered by an existing network and can take advantage of all the newest technologies and most efficient network configuration — and therefore enjoys a competitive *advantage* compared to an incumbent — "the costs of self-providing... elements [are] likely much higher than obtaining them from the incumbent priced at TELRIC." Similarly, in a Policy Paper accompanying the *NPRM*, Commission Staff conclude that successive repricing based on a hypothetical network results in rates that understate costs. As the paper states, "if investment costs are falling over time, and the period between TELRIC price adjustments is shorter than asset lives, then traditional TELRIC pricing will not permit incumbents to recover the cost of their investment." *OSP Paper* at 1. And this shortfall is substantial: "When investment costs are falling by 11% per year (as is assumed for switching assets in the FCC Synthesis Model), the TELRIC correction factor is approximately 50%. That is, switching prices should be increased by 50% from those suggested by Synthesis Model runs." *Id.* at 43 (emphasis added)

Numerous independent analysts have likewise recognized that TELRIC produces UNE rates that are lower than the costs that the ILECs actually incur. For example, Commerce Capital Markets conducted a comprehensive analysis of UNE rates and concluded that, "[f]or all RBOCs, UNEs are priced below cash operating cost, and radically below total operating cost including depreciation and amortization. The discounts from total cost are 50%-60% below total

Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 01-338, FCC 03-36, ¶ 517 n.1581 (rel. Aug. 21, 2003) ("Triennial Review Order").

David M. Mandy and William W. Sharkey, Dynamic Pricing and Investment from Statis Proxy Models, OSP Working Paper Series, No. 40 (Sept. 2003) ("OSP Paper").

The absence of any relationship under TELRIC between UNE rates and costs is also demonstrated by the fact that rates have been ratcheted down, both in successive rounds of price setting proceedings and through this Commission's 271 benchmarking standard, even in the absence of any evidence that *costs* have declined by corresponding amounts. Thus, for example, in just the last year and a half, rates that were previously set based on the Commission's TELRIC rules were reduced yet again, in many cases by an average of as much as 20 to 40 percent in a

Anna M. Kovacs et al., Commerce Capital Markets, Equity Research, *The Status of 271 and UNE-Platform in the Regional Bells' Territories*, at 15 (May 1, 2002) (emphasis added).

Moody's Investors Service, Special Comment: The Far Reaching Impact of UNE-P Regulation, at 4 (Oct. 2003) ("States' application of the FCC's TELRIC methodology has resulted in average UNE-P prices 35% to 50% below the ILEC's residential and small business retail rates."); see also id at 5 ("RBOCs are losing approximately \$18 per line per month in revenue by selling these lines at wholesale rather than retail rates, while apparently shedding far less than \$18 in costs.").

Gregory P Miller & Chris Chapple, Fulcrum Global Partners, Wireline Communications: UNE-P Remains in the Crosshairs, at 2,3 (Aug. 18, 2003) ("Fulcrum Report"); see also Gartner Dataquest, Unbundled Network Element Platform Economic Case Study: Verizon New York, at 3 (Oct. 22, 2003) (when a CLEC purchases UNE-P, "most of the line costs remain, while UNE-P prices are typically 40 percent to 60 percent lower than Verizon's retail price"); Marc Crossman et al., J.P. Morgan Securities, Inc., Equity Research, Industry Update – No Growth Expected for Bells in 2003, the Impact of Local Voice Margin Compression, at 15 (Jul. 12, 2002) ("While the Bells lose roughly 60% of the revenues when they lose a line to a UNE-P based competitor, we estimate that they retain 95% of the costs.").

given state — and in the case of some individual rates by as much as 70 percent or more — without regard to any underlying change in the costs of providing the UNEs. 9/

Similarly, the rates set under TELRIC varied widely among different states for reasons that do not correspond to cost differences. As Professors Arrow, Becker, Carlton, and Solow observe: "While we would not expect identical prices across states, the observed variation appears to be too great to result from differences in costs alone, since the TELRIC methodology is forward-looking and should reflect the costs that an efficient firm would incur to provide an element, if the rest of the network also were efficiently provided." 10/1

In effect, the application of TELRIC has been a "black box" in which the rates are set without any real-world, objective criteria. This has provided regulators with considerable latitude to manipulate rates down to levels designed to induce CLEC entry using UNEs.

Shelanski Decl. ¶¶ 12-13. In a recent article, a former Chairman of the Colorado Public Utilities Commission explained that:

The TELRIC standard, thus practiced, becomes not a careful, principled analysis of forward-looking rates (that cannot be done because the assumptions are the whole game), but rather a vehicle for creating a margin between wholesale and retail rates. The theory is that, if regulators create enough margin between wholesale and retail, then "competitive" entry will occur in the local exchange market. 11/

See Petition for Expedited Forbearance of the Verizon Telephone Companies, filed in WC Docket No. 03-157, Petition for Forbearance from the Current Pricing Rules for the Unbundled Network Element Platform, Attachment B, "The Negative Effect of Applying TELRIC Pricing to the UNE Platform on Facilities-Based Competition and Investment," at 1-13 ("Report on Negative Effect of UNE-P").

Report of Kenneth Arrow, Gary Becker, Dennis Carlton and Robert Solow, (Lexecon, On Behalf of Verizon) at 17 (Nov. 18, 2003), *available at* http://lexecon.com/documents/Publications/1/9/5/VZTECH_Report_Nov_18.pdf ("Arrow Report").

Raymond L. Gifford, Regulatory Impressionism: What Regulators Can and Cannot Do, Vol. 2, Issue 4 Rev. of Network Econ. 466, 474 (2003). The article also notes that "[a] short time horizon, political pressure to show gains in competitive entry, and a plastic rate methodology — all this gives the regulator ample room to furnish the aesthetics of competition.

Moreover, the use of theoretical assumptions and complex algorithms to "design" hypothetical networks makes it difficult for anyone but "experts" to understand how any given rate is calculated. *See Triennial Review Order* ¶ 99 (noting a preference for actual market-based evidence because studies "based on estimates of costs and revenues . . . can be difficult to verify, and thus are more easily manipulated by the advocates."). This "black box" approach has resulted in rates that are neither transparent nor verifiable and that have been set at levels well below cost.

2. TELRIC Sends Incorrect Economic Signals That Have Deterred New Investment and Devalued Existing Investments By All Carriers.

Objective evidence demonstrates that TELRIC sends incorrect economic signals to all carriers and has both created significant disincentives to investment and devalued existing investment. The Commission itself has explicitly noted that "unbundling requirements tend to undermine the incentives of both incumbent LECs and new entrants to invest in new facilities and deploy new technology." *Triennial Review Order* ¶ 3. As numerous economists have recognized, because TELRIC sets rates below the costs any real-world carrier could achieve, it induces CLECs to rely on UNEs even if they could more efficiently and effectively use their own or alternative facilities and technologies. At the same time, TELRIC deters ILECs from investing in new facilities because it prevents them from recovering their costs.

Thus, the TELRIC rate-making becomes the vehicle to accomplish vague industrial policy and politically attractive goals." *Id.* at 475.

See, e.g., Shelanski Decl. ¶ 5 ("Simply put, if a CLEC has a choice between using UNEs at rates below the ILEC's costs or relying on its own (or other alternative) facilities with costs higher than the UNE rates, then the CLEC will choose UNEs even if it could provide service using its own (or alternative) facilities at a cost lower than the ILEC incurs."); Kahn/Tardiff Decl. ¶ 29 ("TELRIC-based charges — which are lower than rates based on the telephone companies' actual incremental costs — would actually discourage competitors coming in and

Objective evidence demonstrates that the availability of UNEs at TELRIC rates has contributed to a decline in investment by ILECs and CLECs. According to one report, between 2000 and 2002, as previously prescribed TELRIC rates were further slashed, overall investment by wireline telecommunications carriers declined from \$104.8 billion to \$42.8 billion — a decline of more than \$60 billion in just two years. See Declaration of Thomas W. Hazlett, et al, Exh. 3 ¶ 12-13. This downward trend applies to incumbents and competing carriers alike. For example, one analyst estimates that total capital expenditures by the Bell companies combined declined by approximately 35 percent from 2001 to 2002 alone. Meanwhile, capital expenditures by facilities-based CLECs reportedly declined by 19 percent from 2000 to 2001, and by 56 percent from 2001 to 2002. See also Hazlett Decl. ¶ 12. And the Wall Street Journal reported that "spending on equipment by the six major telecom operators that have reported was down an average of 19% in the first quarter [of 2003] compared with the same

building their own facilities"); Arrow Report at 22 (noting that low TELRIC rates make it more profitable for CLECs to rely on UNEs rather than their own facilities even if the latter course would be more efficient).

Skyline Marketing Group, *CapEx Report: 2002 Annual Report*, Carrier Data Sheet 1 (June 2003).

Although CLECs and the CFA have conducted or sponsored a few studies that purport to show that the availability of UNE-P at TELRIC rates does not discourage investment (or even encourages it), these studies suffer from numerous flaws that render their conclusions invalid. See Hazlett Decl. ¶¶ 20-36.

UBS Warburg, Fixed-Line Communications, *Are the Bells Growing Less Profitable?* At 41 (Apr. 16, 2003). Verizon's own investments are entirely consistent with this industry trend. From 2000 to 2002, Verizon's capital expenditures for its domestic wireline business dropped from approximately \$12.1 billion to approximately \$7 billion, a decline of over 40 percent. Verizon Communications Inc., Form 10-K 18 (filed with the SEC Mar. 14, 2003).

Association for Local Telecommunications Services, *The State of Local Competition 2003*, at 10 (Apr. 2003)

period the year before, widely considered to be the worst year in the telecom industry's history." 17/

Independent investment analysts and the CLECs themselves agree that the availability of UNEs at TELRIC rates discourages CLEC investment. For example, analysts at McKinsey & Co. and JP Morgan have stated that the incentives created by TELRIC for CLECs are clear: "[n]o company will deploy and scale facilities if it can achieve similar economics immediately by renting network elements from the ILECs — all with little up-front investment." And Scott Cleland of the Legg Mason Precursor Group explained, "why overbuild if one can lease it more cheaply than one can build it? We strongly suspect that the success of the UNE-P resale will adversely affect the incentive for facilities-based competition." Simply put, "UNE-P functions like a tax on investment, rather than a competitive incentive."

In fact, many CLECs themselves have admitted that, under the current TELRIC regime, they have no intention of deploying their own facilities. One CLEC, for example, has told

Almar Latour et al., A Wrong Number for Telecom: Big Operators Cut Spending 19%, Wall St. J. (Apr. 28, 2003).

McKinsey & Co. and JP Morgan H&Q, Industry Analysis: Broadband 2001, A Comprehensive Analysis of Demand, Supply, Economics, and Industry Dynamics in the U.S. Broadband Market, at 18 (Apr. 2, 2001).

The Deployment of Broadband Technologies: Hearing Before the Subcomm. on Telecommunications, Trade & Consumer Protection of the House Energy and Commerce Comm., 106th Cong., Fed. News Serv., at 2 (May 25, 2000) (prepared statement of Scott Cleland, Managing Director, The Precursor Group) ("Cleland Statement"); TeleNomic Research, LLC, Public Policy Bulletin: Telecom Regulations Costing Jobs, at 2 (Fall 2003) ("Evidence now shows that these regulated wholesale prices are predatory and are leading CLECs that once owned facilities to abandon them entirely. With such an effect, why would any CLEC think of building, when it can rent a network for less than it would cost[] to operate one?").

See Scott Cleland, Precursor Group, Why UNE-P Is Going Away: Telecom Competition's Changing Trajectory (Oct. 2, 2002).

investors that its "UNE-P-based business model allows us to avoid significant capital investments in network facilities." Another CLEC has explained that it "ha[s] chosen . . . [UNE-P] to grow our customer base *because* it allows us to rapidly enter new markets with minimal capital expenditures." Similarly, other CLECs have assured the markets that they "can now lease the necessary elements of the Bell network — without the need for costly network infrastructure, which allows us to earn attractive gross margins" and that they are "deploying very little capital" to provide UNE-P service. ^{23/}

Indeed, TELRIC pricing provides CLECs with such substantial profit margins and windfall returns that it often makes no sense for CLECs to invest in their own facilities. As a report by Fulcrum Global Partners observed, UNE-P results in "gross profit margins [for CLECs that] are often north of 50%." Likewise, a Legg Mason December 2002 study showed that at that time UNE-P yielded average gross margins ranging from 47 percent to 66 percent in numerous Verizon states, and Gartner Dataquest has found that UNE-P rates "ensur[e] that CLECs (even the size of AT&T) have the right to earn 40 percent to 60 percent margins."

See~Z-Tel Communications Inc., 2001 Annual Report at i ("Z-Tel was formed around UNE-P.").

eLEC Communications Corp., Form 10-Q at 7 (filed with the SEC July 17, 2000) (emphasis added).

Talk America, 2000 Annual Report 7; Wayne Huyard, Chief Operating Officer, MCI, Using UNE-P To Develop a Strong and Profitable Local Presence, Goldman Sachs Telecom Issues Conference, New York, NY (May 7, 2002); see also Talk America, Form 10-K/A 6 (filed with the SEC Apr. 12, 2002) (Talk America "believes that UNE-P currently provides it with a cost-effective means of adding local service to its existing long distance product offerings.").

Fulcrum Report at 7; see also Vik Grover & Richard Fetyko, Kaufman Bros., Verizon Communications, Inc., at 23 (Jul. 14, 2003) (noting that UNE-P carriers have "gross margins of 45-55%").

Michael J. Balhoff et al., Legg Mason, UNE-P Relief: Investors Expect Too Much, at 9

CLECs are telling their own investors the same thing. AT&T's former Consumer Services president and CEO, for example, has assured investors that AT&T is not "going into states where we don't have a gross margin of 45 percent on the local. That's kind of our threshold trigger to go in"26/ AT&T apparently can attain that substantial profit margin fairly easily since it has already entered the local market in 20 states, and has stated that it expects to be in 35 by the end of 2003. As a result of these margins, AT&T is able to achieve "single customer payback as soon as 11 months," an extremely short time period for a new customer. 28/

The arbitrage opportunity is so great it even has spawned the creation of a cottage industry dedicated to helping companies "become a UNE-P CLEC" in order to take advantage of the "50% to 70% Net Profit Available" in an environment where "[n]o equipment investment is required!" One consultant informs potential UNE-P carriers that "no switching equipment is required, but instead you lease ports on the ILEC's switches for a fraction of the cost of

⁽Dec. 19, 2002); Gartner Dataquest, *Unbundled Network Element Policies Threaten U.S. Telecom Services Growth*, at 1 (Oct. 24, 2003).

Statement of Betsy Bernard, Q2 2002 AT&T Earnings Conference Call – Final, Fair Disclosure Wire, Tr. 072302au.729 (Jul. 23, 2003) (emphasis added) ("Bernard Statement"); see also Talk America, 2000 Annual Report 7 (assuring markets that it can "lease the necessary elements of the Bell network — without the need for costly network infrastructure, which allows us to earn attractive gross margins").

See News Release, AT&T, AT&T Enters Kentucky, Mississippi and Arkansas Local Phone Markets (Dec. 11, 2003).

Bernstein Research Call, AT&T: Dorman at Berstein's SDC Leaves Us Seeing Upside to our Forecast; Maintain Outperform, at 2 (June 5, 2003) (describing presentation of David Dorman, AT&T Chairman and CEO, Sanford Bernstein Strategic Decisions Conference, June 4, 2003)

See American Discount Telecom LLC, 50% to 70% Net Profit Available to UNE-P CLECs, available at http://a-adt.com; see also American Discount Telecom LLC, The US Supreme Court Wants CLEC's To Make More Money With UNE-P' You Don't Need Resale Anymore!, available at http://a-adt.com/une-p-clec.html.

purchasing equipment," which produces "profit margins" that "range from 50-90%." Not surprisingly, then, industry data demonstrate that the UNE-P pricing rules have curtailed investment by CLECs in their own facilities. As the Commission's data show, from December 2000 to December 2002 the number of CLEC-owned lines (other than cable telephony) declined from 4.1 million to 3.4 million very while the number of UNE-P lines skyrocketed from 2.8 to 10.2 million. FCC, *Telephone Competition: Status as of December 31, 2002* Table 3. Thus, while CLEC lines using CLEC switches constituted 67 percent of CLEC lines in December 1999, that figure dropped to 35 percent by the middle of 2002. 32/

In addition to declining investment in new facilities, the current TELRIC rules also have caused CLECs to curtail the use of their *existing* facilities in favor of the UNE platform at artificially low TELRIC rates. The decline in growth of UNE-L is particularly evident in states where UNE-P growth has been highest. As Chairman Powell has observed, "[i]n just eight of the states where carriers now make extensive use of UNE-P, competitors are connecting more than 45,000 fewer lines per month — or more than half a million *fewer* lines per year — to their own

ISG Telecom, Eight Top Reasons to become a UNE-P CLEC in 2003, UNE-P 101 Workshop (Nov. 2002), available at http://www.isg-telecom.com.

Commission data demonstrate that CLEC-owned lines increased from 5.2 million to 6.4 million between December 2000 and December 2002. See FCC, Industry Analysis and Technology Division, Wireline Competition Bureau, Telephone Competition: Status as of December 31, 2002 Table 3 & 5 (June 2003). However, the subset of those totals provided through cable telephony increased from 1.1 million to 3 million. That means that the number of CLEC-owned lines other than those provided through cable telephony decreased from 4.1 million to 3.4 million during that period. Compare id. Table 5 with FCC, Industry Analysis and Technology Division, Wireline Competition Bureau, Telephone Competition: Status as of December 31, 2001 Table 5 (July 2002).

R.E. Talbot, RBC Capital Markets, Industry Report, *Integrated Telecommunication Services – Moderating Expectations for Triennial Review* Investext Rpt. No. 7229059, at *13 (Feb. 18, 2003) ("We expect this trend to continue as CLECs pursue UNE-P based strategies in additional markets").

switches using unbundled loops compared to 2000."^{33/} In at least two of these eight states, the number of UNE-L lines has actually *decreased* in absolute terms. *See Report on Negative Effect of UNE-P* at 15-16. During the same time period, competing carriers nationwide added more than 9 million UNE-P lines — an increase of approximately 2000 percent. *Id.* at 16. Independent analysts have observed the same trend.^{34/} Moreover, competing carriers have begun to move *existing* customers that they were serving using their own facilities to UNE platform arrangements. For example, evidence filed with the Commission in its *Triennial Review* proceeding demonstrated that a number of carriers had begun to transfer lines off their own switches and onto UNE-P arrangements.^{35/}

TELRIC likewise discourages new investment by ILECs and other facilities-based providers. Shelanski Decl. ¶¶ 4-5. As noted by a recent report by the Alliance for Public Technology, "[b]y allowing competitors to lease facilities at below-cost rates, there are no incentives for the incumbent to invest in capital-intensive new technologies or for competitors to build their own networks." And Gartner Dataquest observed that "[a]s a product of the FCC's

Triennial Review Order, Separate Statement of Chairman Michael K. Powell, at 6 (rel. Aug. 21, 2003) (emphasis in original) ("Powell Statement"). The eight states are New York, New Jersey, Massachusetts, Georgia, Florida, Illinois, California and Texas.

See, e.g., Talbot, Investext Rpt. No. 7229059, at *13 ("Competitor UNE Lines with CLEC switching declined to 35% (or 4.1 million) of total UNE switched lines. This compares to 39% (3.7 million) in the preceding six months and 67% as at December 1999. We expect this trend to continue as CLECs pursue UNE-P based strategies in additional markets.").

See, e.g., UNE Rebuttal Report 2002, Prepared for and Submitted by BellSouth, SBX, Qwest, and Verizon, filed in CC Docket Nos. 01-338, et al., 31, n.161(Oct. 23, 2002); Letter from William Barr, Verizon, to Michael Powell, FCC, at 17-18, attached to Ex Parte Letter from Ann Berkowitz, Verizon, to Marlene Dortch, FCC, filed in CC Docket No. 01-338 (Oct 16, 2002).

Alliance for Public Technology, Increasing Access to Telecom and Broadband Networks in California: Consumer Perspectives on Telecommunications Regulation (Oct. 2003).

[unbundling] policies, ILECs are reluctant to introduce new and creative service offerings that would only reduce the subsidy recovery further."^{27/} Unbundling itself deters ILEC investment since the obligation to share new investment or innovation deprives the incumbent of any competitive advantage from that investment or innovation; the requirement to share facilities at TELRIC rates that do not recover ILECs' costs creates an even stronger disincentive. *See*Netaxis, *Verizon* (Dec. 1, 2003) (noting that Verizon is directing investment toward "services that are free from unbundling requirements, and away from services such as copper UNE-Ps and EELs that must be wholesaled to competitors at subsequently much lower rates of return.").

Moreover, under TELRIC, facilities-based competitors find their rates undercut by CLECs who benefit from below-cost UNE rates, and they are accordingly unable to recover their investment costs. ^{38/} Facilities-based carrier Allegiance Telecom, for example, has indicated that low UNE-P prices "mak[e] it more difficult for efficient facilities-based [competitive local exchange carriers] to compete." Similarly, commenting on WorldCom's plan to expand its UNE-P offerings, Legg Mason wrote: "the more successful the plan is, the more it will reduce the attractiveness of the telephony opportunity for cable."

Gartner Dataquest, Unbundled Network Element Policies Threaten U.S. Telecom Services Growth, at 7 (Oct. 24, 2003).

See Gartner Dataquest, Unbundled Network Element Policies Threaten U.S. Telecom Services Growth, at 7 (noting that CLECs "typically price their competitive services 10 percent to 15 percent below ILEC retail prices" and that "[b]y availing themselves of UNE-P, competitors can undercut ILEC retail service rates.").

See Letter from Kevin M. Joseph, Vice President Government Affairs, Allegiance Telecom, Inc., to Magalie Salas, FCC, CC Docket No. 96-98, Attachment at 2 (Feb. 1, 2001).

Blair Levin et al., Legg Mason Equity Research Industry Update, WorldCom/MCI Bundled Phone Offer Challenges Rivals, Regulators, at 2 (Apr. 23, 2002).

Decline in telecommunications investment could have serious consequences not only for consumers, but also for the entire U.S. economy. Indeed, one analyst estimates that UNE-P pricing has contributed to an annual decline in economic output and national income equivalent to \$101 per household. As Professors Arrow, Becker, Carlton, and Solow explain, "reduced incentives to invest in telecommunications infrastructure and services could result in considerable economic harm." *Arrow Report* at 12. Telecommunications investment plays a central role in the U.S. economy; both the boom of the 1990s, as well as the subsequent crash, were driven in substantial measure by the state of the telecommunications industry. Indeed, total factor productivity growth tripled during 1995-1999 as a result of telecommunications innovation. *Id*.

Although the economy is now beginning to show signs of growth, the telecommunications industry is lagging behind other sectors of the economy. See Hazlett Decl. ¶ 13; Adam Quinton, Merrill Lynch, AT&T Corp, at 1 (Dec. 12, 2003) ("The disconnect between the recent surge in GDP growth and telecom revenue trends has become more stark."). As Morgan Stanley noted, "[t]elecom was the only sector in the S&P 500 with negative revenue growth in 2Q03." More than 900,000 jobs have been lost in telecommunications and information industries since 2001. Precursor observed that "fundamentally, wireline telecom

Stephen B. Pociask, New Millennium Research Council and Competitive Enterprise Institute, *The Effects of Bargain Wholesale Prices on Local Telephone Competition: Does Helping Competitors Help Consumers?* at 20 (June 2003).

Morgan Stanley, 2Q03 Trend Tracker: Casualties of War, at 3 (Aug. 19, 2003); see also Jessica Hall, U.S. Telecoms Pour Extra Cash Into Dividends, Reuters News (Dec. 3, 2003) (emphasis in original) (also noting that "the telecommunications sector is the only group in the S&P 500 to drop this year" and that "[s]tock prices in the telecom group have fallen 5.1 percent, compared with an increase of 21.2 percent for the broader S&P 500 index.").

^{43/} Alliance for Public Technology, Increasing Access to Telecom and Broadband Networks

equipment is and will likely remain a big exception and laggard to the current robust tech recovery.... The wireline telecom sector has fundamentally decoupled from the rest of the tech sector and from the economy, in large part because regulators managed competition policies." Precursor Group, *The Incredible Shrinking CapEx Budgets* (Sept. 12, 2003). If the telecommunications sector is permitted to wither due to a regulatory climate that is unfavorable to new investment, as Professors Arrow, Becker, Carlton, and Solow conclude, "economic growth would be hit with a double whammy: slower TFP growth in important industries that produce high-technology equipment, and slower capital accumulation in other sectors that invest in and use that equipment. Both factors have made important contributions to the recent success of the U.S. economy, so that any slowdown would retard future growth potential." *Arrow Report* at 12 (citing Dale Jorgenson and Kevin Stiroh, *Raising the Speed Limit: U.S. Economic Growth in the Information Age*, Brookings Papers on Economic Activity, v.1, 185 (2000)).

TELRIC has not only contributed to a decline in *new* investment, but also devalued facilities investments that ILECs and other CLECs and intermodal competitors have already made. As one analyst put it, "the macroeconomic consequences of the FCC's TELRIC fiat was to devalue three quarters of the Nation's telecom infrastructure by two-thirds." *Cleland Statement* at 2. To take just one measure, the market capitalization of the telecommunications and equipment manufacturing sectors declined by \$2 *trillion* between 2000 and 2002. This devaluation extends to competing facilities-based providers because CLECs that take advantage of the arbitrage opportunity created by TELRIC can undercut those investments. Thus, as one

in California: Consumer Perspectives on Telecommunications Regulation, at 8 (Oct. 2003).

See, e.g., Steven Rosenbush et al., Inside the Telecom Game: How a Small Group of Insiders Made Billions as the Industry Collapsed, BusinessWeek (Aug. 5, 2002); Paul Starr, The Great Telecom Implosion, Am. Prospect, Vol. 13, Issue 16 (Sept. 9, 2002).

analyst has concisely explained, the "consequences of the FCC's strategy has been to effectively devalue all infrastructure investment by everyone, incumbents and competitors alike." *See Cleland Statement* at 2. As a result, "[s]ix years following the Act, we are left with virtually no structural incentive for any company to ever build an alternative local network that will compete with local carriers over time."

3. TELRIC Has Prevented the Development of a Rational Wholesale Market.

The TELRIC rules have precluded the development of a rational wholesale market. Incumbents have every incentive to recover their costs by filling their networks with revenue-producing traffic. While an incumbent would generally prefer to have the end user as its customer and collect the resulting retail revenues, it clearly would rather collect the revenue generated by having the wholesale traffic on its network than forfeit this revenue *entirely* because that traffic ends up on alternative facilities, such as cable and wireless networks. This is particularly true because, as explained below, incumbents already are losing millions of lines and billions of minutes to facilities-based competitors, including cable telephony providers, wireless carriers, and less traditional sources of competition such as VoIP, e-mail, and instant messaging. Thus, incumbents have strong reasons to enter into rational, voluntary wholesale arrangements at compensatory rates. *See* Kahn/Tardiff Decl. ¶ 7-13.

If not for the TELRIC regime, incumbents would be in a similar position to AT&T when the long distance market was opened to competition. In that case, as here, AT&T had market incentives to offer competitive but rational terms to wholesale customers to keep as much long distance traffic as possible on its network rather than having traffic migrate to competing

Gregory P. Miller and Chris Chapple, Fulcrum Global Partners, *Wireline Communications: Thoughts on FCC Order*, at 2 (Feb. 25, 2003).

facilities. As a result, a wholesale market developed in which carriers purchased capacity from AT&T at compensatory rates and resold that capacity to end users. TELRIC, particularly when applied to UNE-P, has precluded the development of a similarly rational wholesale market for local telecommunications by setting rates that are well below the costs of any real-world carrier.

B. The Rapid Growth of Intermodal Competition Has Exacerbated the Distortions Created by TELRIC.

The Commission's current TELRIC pricing rules were adopted shortly after the passage of the 1996 Act with the avowed purpose of "jump starting" competition. Actual market developments since then — and particularly the explosive growth of intermodal competition have made the TELRIC rules (and their underlying purpose) an anachronism, if they ever were needed. The development of such competition has also multiplied the ways in which TELRIC distorts economic signals and investment incentives. See Kahn/Tardiff Decl. ¶¶ 7-13. Incumbents must compete with competitors such as cable companies and wireless providers, while being handicapped by the requirement that they subsidize CLEC entry through below-cost UNE rates At the same time, these intermodal providers are forced to compete with CLECs that have the artificial advantage of below-cost UNEs. As Drs. Kahn and Tardiff explain, TELRIC makes the mistake of trying to predict — and base prices on — the outcome of competition, rather than to facilitate the competitive process. See Kahn/Tardiff Decl. ¶ 7. But where real competition ultimately develops from firms with different types of technologies and different entry strategies, "basing 'predictions' of what levels competitive prices would ultimately reach on the real or hypothetical network structure of any particular firm or firms (as TELRIC tries to do) becomes increasingly problematic and, perhaps more important, impossible to validate" Id. ¶ 12. In the context of the competition that has developed, the TELRIC pricing rules not only make no sense, but cause affirmative harm.

Intermodal competition has developed in virtually every market the ILECs serve. For example, cable telephony providers now represent a substantial and growing threat to the ILECs' voice services. In the words of Morgan Stanley, cable telephony "represents the largest long-term competitive threat to the RBOCs." Morgan Stanley, 2Q03 Trend Tracker: Casualties of War, at 13. At least four cable operators have deployed circuit-switched cable telephony in twenty states — cable telephony is now available to more than 15 million U.S. homes (approximately 15 percent of the mass market) and cable operators are adding tens of thousands of new subscribers each month. In fact, cable operators boast of penetration rates as high as 40 percent in the most mature markets, and 20 percent in less mature markets.

See, e.g., Press Release, Charter Communications, Charter Announces 2002 Operating Results and Restated Financial Results for 2001 and 2000; Company Will Extend Filing of Form 10-K (Mar. 31, 2003); Press Release, RCN, RCN Announces Fourth Quarter and Year-End 2002 Results (Mar. 13, 2003); Press Release, Comcast, Comcast Full Year and Fourth Quarter Results Meet or Exceed All Operating and Financial Goals (Feb. 27, 2003); Press Release, Insight Communications, Insight Communications Announces Fourth Quarter and Year-End 2002 Results (Feb. 25, 2003); Press Release, Cox Communications, Cox Communications Announces Fourth Quarter Financial Results for 2002; Strong Demand for Cox's Digital Services Builds Solid Foundation for Continued Growth in 2003 (Feb. 12, 2003); Press Release, Cablevision Systems, Cablevision Systems Corporation Reports Fourth Quarter 2002 Financial Results (Feb. 11, 2003); Knology, Inc., Form 10-K (filed with the SEC Mar. 31, 2003).

See Reply to Comments and Petitions to Deny Applications for Consent to Transfer Control of AT&T Corp. and Comcast Corp, filed in MB Docket No. 02-70, at 11 (May 21, 2002) ("AT&T Broadband is capable of serving approximately seven million households, has enrolled over 1.15 million cable telephony customers, and is adding approximately 40,000 customers per month.").

See, e.g., Dan Somers, President and CEO, AT&T Broadband, Operational Overview, AT&T Broadband, Investor Presentation, at 16-17 (July 2001) ("Some [Chicago] suburbs have 40 percent penetration"); Cox Communications, Whitepaper: Preparing for the Promise of Voice-over Internet Protocol (VoIP), at 1 (Feb. 2003), available at http://www.cox.com ("in areas where the service has been available the longest, penetration is . . . up to 40 percent."); James Granelli, Expanding Cable Telephony Is New Kid on SBC's Block, L.A. Times (Jan. 21, 2003) ("As of the end of September, Cox provided telephone service for 30% of the 304,000 households it has wired in 14 south Orange County cities, where nearly all the homes are hooked up. It has a similar share in the San Diego County communities it serves."); News Release,

that there were already 3 million subscribers to cable telephony as of the end of 2002. FCC, *Telephone Competition: Status as of December 31, 2002* at 2.

A second source of intermodal competition — which all parties recognize is poised to grow at a rapid rate — comes from the deployment of VoIP. Cable operators throughout the country have begun deploying commercial VoIP services. [49] Indeed, AOL Time Warner announced only recently that it had reached a deal under which it would provide VoIP service on a *nationwide* basis and be in "most, if not all, of its markets" by the end of 2004. [50] Cablevision has deployed cable telephony service throughout its New York and New Jersey service area. [51] All other major cable companies similarly have now introduced initial commercial VoIP service or have trials in process. *See* Richtel, N.Y. Times (Dec. 9, 2003); Breznick, Cable Datacom

AT&T, AT&T Broadband -Comcast Merger Will Create More Competitive Marketplace (Apr. 23, 2002) (Then AT&T chairman C. Michael Armstrong said "AT&T Broadband has already gained 25 percent or higher cable telephony penetration in 55 communities").

See Alan Breznick, Major MSOs Prepare for Full-Scale Rollouts of VoIP Service: Comcast and Cox Shift into Launch Mode, Joining Time Warner and Cablevision, Cable Datacom News (Nov. 2003), available at http://www.voip-news.com/mso.html (noting that Time Warner Cable, Cablevision Systems, Cox Communications and Comcast Corp., as well as many small cable operators, have all either already introduced commercial voice-over-IP services or are launching "soft" market rollouts or large market trials); Cox Digital Telephone, Do we need another local phone service provider?, available at http://www.cox.com/telephone/Frequently %20Asked%20Questions.asp (Over 350,000 customers have already switched to Cox's telephony service.).

Matt Richtel, *Time Warner to Use Cable Lines to Add Phone to Internet Service*, N.Y. Times (Dec. 9, 2003); see also Glenn Britt, Chairman & CEO, Time Warner Cable, Presentation at *UBS Warburg Media Conference* (Dec. 11, 2003) (presenting nationwide VoIP plan and describing VoIP as "the next big business opportunity").

See David P. Willis, Cable Calling, Asbury Park Press (Nov. 23, 2003) available at http://www.app.com/app/story/0,21625,859803,00.html (Cablevision Systems now offers voice-over-IP services in New Jersey, New York, and Connecticut); see also Tom Rutledge, President Cable and Communication, Cablevision, Presentation at UBS Warburg Media Conference (Dec. 11, 2003) (presenting the company's rollout of VoIP in the New York area).

News (Nov. 2003). Investment analysts have pointed to cable companies' rollout of these services as "the largest risk to Bell fundamentals over the next 5 years," noting that "the impact on margins is increasingly evident today." Goldman Sachs, for example, predicts that VoIP providers are likely to have 20 percent to 30 percent of the residential voice market, "with serious share gains by 2005." As one analyst described, "[t]he paranoia that I think most of the ILECs feel today is about true VoIP — the IP technology and the likelihood that the cable companies are going to be able to launch that broadly in the next few years." Cable companies, of course, are not the only providers offering VoIP service. For example, Vonage — a provider of exclusively VoIP services — provides service to customers throughout the country.

At the same time, wireless telephony has already captured not only subscribers, but also large quantities of traffic from wireline networks. As Chairman Powell has observed, "much of the most significant competition in voice . . . has come from wireless phone service." 56/

John Hodulik, UBS Investment Research, Cable Telephony Competition: Who Gets It? at 1 (Aug. 7, 2003).

Frank Governali et al., Goldman Sachs, Telecom Services, Broadband—the pie is growing; the telco slice isn't, at 2 (Dec. 10, 2003).

Health of the Telecommunications Sector: A Perspective from Investors and Economists: Hearing Before the Subcomm. on Telecommunications and the Internet of the House Comm. on Energy and Commerce, 108th Cong. 62 (2003) (statement of Steve Brodeur, President, Cambridge Strategic Management Group); see also Bernstein Research, Cable and Telecom: New Cable Telephony Business Models May Prove Disruptive to Both Sides, at 6 (June 27, 2003) (noting "significant risk" to incumbents with exposure to Cablevision and Time Warner's VoIP competition).

Press Release, Vonage, Vonage Completes 100 Million Calls Over its SIP Network (Dec. 10, 2003).

Competition Issues in the Telecommunications Industry: Hearings Before the Senate Comm. on Commerce, Science, and Transportation, 108th Cong. (2003) (prepared statement of

have estimated that wireless traffic has displaced 30 percent of total wireline minutes. ^{52/} This trend is accelerating as wireless minutes of traffic are growing much faster than wireline minutes. ^{58/} Lehman Brothers estimates that 8 million households have wireless phones but no landlines, and that 25 million additional households are candidates for giving up wireline connections. ^{59/} In addition, Lehman Brothers estimates that wireless accounted for 30 percent of total telecom sector revenue in 2002, up from 5 percent in 1996. ^{60/} Indeed, Merrill Lynch reports that between 1997 and 2002, wireless revenue has grown by 154 percent. ^{61/} By 2006, a Yankee Group study predicts, U.S. mobile subscribers will increase by 50 percent and will "dominate

Michael K. Powell, Chairman, FCC). See also Memorandum Opinion and Order, Application by SBC Communications Inc., Nevada Bell Telephone Co., and Southwester Bell Communications Services, Inc., for Authorization to Provide In-Region, InterLATA Services in Nevada, 18 FCC Rcd 7196, 7204 ¶ 15 (2003) (finding that broadband PCS "represents an actual commercial alternative to [a BOC] for residential telephone exchange services.").

See FCC Reports Wireless Sub Growth is Leveling, Mobile is on Rise, Communications Daily, Vol. 23, Issue 124 (June 27, 2003).

Phil Cusick et al., Bear, Stearns & Co., Inc., Industry Report, Non-Public Operators Steal the Show... Again, Investext Rpt. No. 7397790, at *7 (May 20, 2003) ("For the next year we are looking for [wireless] minute-usage growth of 16% per user, and 26% overall as more customers are added and more telecom minutes are migrated to wireless."); 3G Rollouts Inch Along, But Kagan Research Indicates Wireless Minutes Roaring Ahead, Set to Dominate Telecom Landscape by 2005, Bus. Wire (Apr. 27, 2001) (landline minutes growing in "low single digits"); see also Phil Cusick et al., Bear, Stearns & Co., Inc., Wireless Services – Searching for the Catalysts, Investext Rpt. No. 7393872, at *31 (May 13, 2003) (expecting "increasing minute usage as the wireline-wireless cannibalization continues.").

Christine Nuzum, *Update: Americans Cut Their Wires, Threatening Carriers*, Dow Jones News Serv. (Sept. 24, 2003).

See FCC Reports Wireless Sub Growth is Leveling, Mobile is on Rise, Communications Daily, Vol. 23, Issue 124 (June 27, 2003)

Merrill Lynch, Telecom Services, *Unraveling Revenues, Telecommunications*, at 3 (Nov. 20, 2003). Merrill Lynch anticipates that this trend will continue, predicting that wireline revenues will decline 14 percent from 2002 to 2005, and that wireless revenues will increase by approximately 25 percent during this period. *Id.*

personal calling and severely cannibalize landline minutes of use." ILECs are also losing traffic as a result of the growth of e-mail and instant messaging services. It is estimated that consumers in the United States are sending approximately 3.2 billion e-mail messages ^{63/} and approximately 1 billion instant messages per day. ^{64/}

This rapid emergence of intermodal competition undermines the fundamental premise of TELRIC that artificially low UNE rates are necessary to "jump start" local competition. And the Commission must in any event reform TELRIC to ensure that it does not affirmatively decrease competition by undermining the investment incentives for all facilities-based competitors and, in particular, handicapping the ability of facilities-based wireline carriers to be vigorous competitors in the world of intermodal competition.

News Release, Yankee Group, Consumers Abandon Landlines and Increase Mobile Call Volumes, Creating Strong Growth in the Wireless Market, Reports Yankee Group (Sept. 16, 2002).

See T. Shinkle, Time for a New Look at E-mail Management, Computer Technology Rev., at 48 (June 2001)

See R. Gann, Fast Talking Instant Messaging Software, Internet Magazine, at 140 (Jan. 1, 2001).